

72 RF 8660

EG&G ROCKY FLATS INC

ROCKY FLATS PLANT P O BOX 464 GOLDEN COLORADO 80402-0464 (303) 966 7000

July 31 1992

92 RF 8660

Terry A Vaeth
Manager
DOE, RFO

Attn J K Hartman B K Thatcher

GUIDELINES TO RESPONSE TO EPA AND CDH COMMENTS TECHNICAL MEMORANDUM NO 6
OPERABLE UNIT NO 1 EXPOSURE SCENARIOS REVISION 4 0 JMK 0728 92

Ref J K Hartman ltr (5471) to J M Kersh Comments on Revision 3 0 of Technical Memorandum No 6 Operable Unit No 1 May 11 1992

A guideline to cross reference our previous responses to comments from the U S Environmental Protection Agency and the Colorado Department of Health is attached - This guideline served as the basis for our revision on Technical Memorandum No 6 The revised Technical Memorandum No 6 was submitted to the Department of Energy Rocky Flats Office on July 6 1992

If you have any questions regarding this letter please contact D M Smith of Remediation Programs at extension 8636


J. M. Kersh Associate General Manager
Environmental and Waste Management

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Orig and 1 cc T A Vaeth

**Attachment
As Stated**

cc
S M Grace DOE RFO

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GUIDELINES TO RESPONSE TO EPA AND CDH COMMENTS TECHNICAL MEMORANDUM NO 6, EXPOSURE SCENARIOS, REV 4 0

Technical Memorandum No 6 Exposure Scenarios Rev 3 0 has been revised in response to Environmental Protection Agency and Colorado Department of Health comments Key changes include the addition of a future on site resident scenario and adjustments of selected exposure parameters Comments were addressed in the document and may be located with the following guide

ENVIRONMENTAL PROTECTION AGENCY COMMENTS

No	Comment Reference	Disposition
1	Page 8 last paragraph	The paragraph has been updated to indicate that the compatibility of PHE and EE exposure scenarios will be considered by risk management.
2	Page 18 Section 3 3 Current On-site land Use	The last paragraph was modified to state that a quantitative assessment will be performed
3	Page 19 Last Paragraph	A quantitative assessment will be performed for the current on-site commercial/industrial scenario (security specialist)
4	Page 20 Thurd Paragraph	A quantitative assessment will be performed for the current on-site commercial/industrial scenario (security specialist)
5	Page 24 Section 3 5 Future On-site Land Use	A quantitative assessment will be performed for the future on-site residential scenario
6	Page 25 First Full Paragraph	A quantitative assessment will be performed for the future on-site residential scenario
7	Page 29	A quantitative assessment will be performed for the future on-site residential scenario
8	Page 26 Second Full Paragraph	The paragraph has been modified to more accurately reflect the intent of the AEC statements
9	Page 27 first paragraph	The quantitative assessments for future on-site scenarios have been modified to include residential ecological reserve and commercial/industrial
10	Page 36 Section 5 0 Exposure Pathways	Equations consistent with RAGS are currently under development and will be included in PHE
11	Page 37 Figure 5 1 Conceptual Model	Current on-site receptors have been added to the model
12	Table 5 2 Potentially Complete Exposure Pathways Future Land Use a.	Potential contaminant radionuclides (americium plutonium, uranium) emit alpha radiation incapable of penetrating the outer dead layers of the skin External doses attributable to accompanying penetrating radiation are typically three orders of magnitude less than internal doses and are expected to be negligible at environmental levels.

**GUIDELINES TO RESPONSE TO EPA AND CDH COMMENTS
TECHNICAL MEMORANDUM NO 6, EXPOSURE SCENARIOS, REV 4 0**

ENVIRONMENTAL PROTECTION AGENCY COMMENTS

No.	Comment Reference	Disposition
13	Table 5 2 Potentially Complete Exposure Pathways Future Land Use b	The table has been updated and the future off-site scenarios have been deleted
14	Table 5 2 Potentially Complete Exposure Pathways Future Land Use c	The table has been updated and the future off-site scenarios have been deleted
15	Page 46 Table 5 3 Residential Occupant Exposure Assumptions a	The table has been updated to reflect soil ingestion rates as requested
16	Page 46 Table 5 3 Residential Occupant Exposure Assumptions b	An additional Appendix C has been added (881 Hillside (OU1) Well Production Test Results) The text of Section 4 1 3 has been modified to provide reference to Appendices B and C
17	Page 46 Table 5 3 Residential Occupant Exposure Assumptions c	The table has been updated to reflect adherence factors as requested
18	Page 46 Table 5 3 Residential Occupant Exposure Assumptions d	The table has been updated to reflect absorption factors as requested
19	Page 46 Table 5 3 Residential Occupant Exposure Assumptions e	The table has been updated to reflect body surface area as requested
20	Table 5-4 Ecological Research Biologist Exposure Assumptions a	The table has been updated to reflect soil ingestion rates as requested
21	Table 5-4 Ecological Research Biologist Exposure Assumptions b	The table has been updated to reflect exposure duration as requested
22	Table 5 5 Commercial/ Industrial Worker Exposure Assumptions a.	The table has been updated to reflect inhalation rate as requested
23	Table 5 5 Commercial/ Industrial Worker Exposure Assumptions b	The table has been updated to reflect body surface area as requested
24	Table 5 5 Commercial/ Industrial Worker Exposure Assumptions c	The table has been updated to reflect absorption factors as requested

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ENVIRONMENTAL PROTECTION AGENCY COMMENTS

No.	Comment Reference	Disposition
25	Appendix B Investigation and Simulation of Water Production Capabilities	An additional Appendix C has been added (881 Hillside (OU1) Well Production Test Results)

COLORADO DEPARTMENT OF HEALTH COMMENTS

No	Comment Reference	Disposition
1	Section 3 5 page 28	As explained in the text of Appendix B the wells near Standley Lake are probably completed in the Basal Arapahoe Conglomerate This unit probably has higher hydraulic conductivity than the sandstone units beneath OU1 and may receive recharge from Standley Lake An additional Appendix C has been added (881 Hillside (OU1) Well Production Test Results)
2	Section 3 5 pages 28 and 29	A quantitative assessment will be performed for the future on-site resident
3	Section 3 5 page 29	A quantitative assessment will be performed for the future on-site resident
4	Appendix B Page B 1	An additional Appendix C has been added (881 Hillside (OU1) Well Production Test Results)
5	Appendix B Page B 3	Lenticular sandstones be they long and thin or short and wide are still of limited extent. It has been established that the sandstone units are of limited extent in the thickness and width dimensions Despite the fact that there is uncertainty concerning their length the model results the hydrogeologic interpretation remain unchanged The text has been modified for clarification
6	Appendix B Page B 5	An additional Appendix C has been added (881 Hillside (OU1) Well Production Test Results)
7	Appendix B Page B-6 Table B 3	The table has been updated to reflect 0 34 m ³ /h The model used the correct data.
8	Appendix B Page B 8	An additional Appendix C has been added (881 Hillside (OU1) Well Production Test Results)